

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,898	12/31/2003	Paul J. Buras	API-1022-COS-921	8912
25264 FINA TECHNO	7590 05/24/200' OLOGY INC	7	EXAMINER	
PO BOX 674412			BRUNSMAN, DAVID M	
HOUSTON, TX 77267-4412			ART UNIT	PAPER NUMBER
			1755	
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			MAIL DATE	DELIVERY MODE
			05/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Interview Summary	10/749,898	BURAS ET AL.			
merview dummary	Examiner	Art Unit			
	David M. Brunsman	1755			
All participants (applicant, applicant's representative, PTO personnel):					
(1) <u>David M. Brunsman</u> .	(3)				
(2) <u>Shirley A Kopecky</u> . (4)					
Date of Interview: 21 May 2007.					
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant 2)□ applicant's representative]					
Exhibit shown or demonstration conducted: d)⊠ Yes e) No. If Yes, brief description: attached.					
Claim(s) discussed: <u>all</u> .	•				
Identification of prior art discussed: all.		•			
Agreement with respect to the claims f) was reached. g) was not reached. h) № N/A.					
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: <u>Examiner discussed attached Proposed amendments/Remarks of attached exhibit with applicant's representative.</u> Applicant to file formal copy with office via fax.					
(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)					
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.					
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Examiner Note: You must sign this form unless it is an	Ju				

U.S. Patent and Trademark Office PTOL-413 (Rev. 04-03)

Attachment to a signed Office action.

Examiner's signature, if required

# **Summary of Record of Interview Requirements**

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

# Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed.
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
  - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### **Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

# TOTAL PETROCHEMICALS

Legal Department P.O. Box 674412, Houston, Texas, 77267-4412 1201 Louisiana St., Ste 1800, Houston, Texas, 77002

То:	e: Examiner Brunsman		m: Shirley A. Kopecky			
Fax:	ax: (571) 273-1365		ne: 713-483-5386/281-884-7503			
Pages:	Including cover sheet	Fax	713-483-5384//281-884-0623			
Phone:	(571) 272-1124	Dat	e: May 21, 2007			
Re:	Serial No. 10/749,898 (COS-921)	CC:				
☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle						
• Comments:						
			Customer No: 25264			
In re Application of: Paul J. Buras, et al.		§				
Serial No.: 10/749,898		§ §	Group Art Unit: 1755			
Confirmation No.: 8192		ş				
Filed: December 31, 2003		999	Examiner: David M. Brunsman			
For: Process For Preparing Bitumen Compositions With Reduced Hydrogen Sulfide Emission		๛๛๛๛๛๛๛๛๛	Attorney Docket No. COS-921			

Attached is a courtesy copy of the complete amendment that was faxed today.

Apparently, the Remarks/Arguments section was <u>not</u> transmitted along with the other portions of the Amendment that was electronically filed on May 8.

I am at the 281-884-7503 telephone number today, and will be at 713-483-5386 Tuesday, Wednesday, and Thursday afternoon in the event you would like to discuss the response and amendments. Thank you for telephone call.

THIS FACSIMILE TRANSMISSION MAY CONTAIN INFORMATION WHICH IS PRIVILEGED, OR OTHERWISE CONFIDENTIAL. IF YOU ARE NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISCLOSURE, USE OR DISSEMINATION OF THIS INFORMATION IS IMPROPER AND PROHIBITED. IF YOU HAVE RECEIVED THIS TRANSMISSION IN ERROR, KINDLY CALL THE SENDER TO ARRANGE FOR ITS RETURN.

TO: Auto-reply fax to 2818847623 COMPANY:

# **Auto-Reply Facsimile Transmission**



TO:

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Fax Information

Date Received: Total Pages: 5/21/2007 1:42:53 PM [Eastern Daylight Time]

12 (including cover page)

ADVISORY: This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

Received Cover Page

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	Sarlal No.: 10/740,896 §
•	Continue from No: 6912 § Group Art Limit 1755
	Flad: December 31, 2005 \$  For: PROCESS FOR PREPARING BITUMEN \$  COMPOSITIONS WITH REDUCED HYDROGEN \$  SULFIDE EMISSION \$
	See attached Transmittal Letter, Amendment and Response related to Office Action dated, February 7, 2007. A Polition and Fee for Extension of Time Under 37 CFR § 1.138(a) for One Month atong with several Terminal Disclaimers were previously filed on May 8, 2007, along with an Amendment/Office Action Response. However, the Remarks/Arguments section was not transmitted along with the other portions of the Amendment that was electronically filed on May 8, 2007.
	THIS FACSAREE TRANSMISSION MAY CONTAIN INFORMATION WHICH IS PROVIDED ON OTHERWISE. CONTRIBUTION OF THE WORLD SECRETARY WHICH IS PROVIDED THAT MAY DISCLOSURE. USE OF CERESHIPMON OF THE PROPRIETION OF THE SECRETARY OF THE SECRETA

Attorney Docket No. COS-921 Customer No: 25264

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Paul J. Buras, et al.
Social No. 10/740 808

Serial No.: 10/740,898

Confirmation No.: 8912

Filed: December 31, 2003

For: PROCESS FOR PREPARING BITUMEN COMPOSITIONS WITH REDUCED

HYDROGEN SULFIDE EMISSION

Mail Stop Response After Final Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Honorable Commissioner:

Examiner: BRUNSMAN, David M.

Group Art Unit: 1755

Attorney Docket No. COS-921

**CERTIFICATE OF FACSIMILE 37 CFR 1.8** 

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office to the designated fax 571-273-8300, to the attention of the named Examiner on the date below.

May 21, 2007

TRANSMITTAL LETTER

In connection with the above-identified application, Applicants respectfully submit

 Replacement Amendment/Response After Final Rejection related to Office Action dated February 7, 2007.

No fees are believed to be due in conjunction with the filing of this response. However, in the event fees are due, The Commissioner is hereby authorized to charge the required fee of along with any additional fees that may be required for this submission, or to credit any overpayments to Deposit Account No. 03-3345.

Date: Man H. 2007

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Respectfully submitted

Shirley A. Kopecky Registration No. 48,460

FINA TECHNOLOGY, INC

P.O. Box 674412

Houston, Texas, 77267-4412 Telephone: 713-483-5386

Facsimile: 713-483-5383/281-884-0623

Attorney for Applicant(s)

# Customer No. 25264 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Paul J. Buras, et al.	§	
	§ ·	
Serial No.: 10/749,898	§ Group Art Unit: 1755	
•	§	
Confirmation No.: 8192	§	
	§	
Filed: December 31, 2003	§ Examiner: David M. Brunsma	n
	§	
For: Process For Preparing Bitumen	§ Attorney Docket No. COS-921	
Compositions With Reduced	§	
Hydrogen Sulfide Emission	<b>§</b> .	

Mail Stop Response After Final Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Honorable Commissioner:

### RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT

In response to the notice of non-compliant amendment, Applicants retransmit the Amendment and Response after Final Office Action related to the Final Rejection dated February 7, 2007. Apparently, the Remarks/Arguments section was not transmitted along with the other portions of the Amendment that was electronically filed on May 8, 2007. Several Terminal Disclaimers were also previously filed on May 8, 2007.

The Listing of Claims begins on Page 2. Remarks/Arguments begin on Page 7.

#### Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in this application. Please amend the claims as follows:

#### Claims

We Claim:

1. (Currently Amended) A method for reducing hydrogen sulfide emissions from asphalt, comprising:

adding zinc oxide to asphalt in an amount effective to reduce hydrogen sulfide (H<sub>2</sub>S) emissions, and

——wherein an amount of from greater than 0.05 0.1 wt % to less than 3.0 wt % of zinc oxide is added to the asphalt:

adding from 0.01 wt % to less than 0.05 wt % of a crosslinker to the asphalt; and wherein the zinc oxide reduces hydrogen sulfide emissions.

- 2. (Cancelled).
- 3. (Original) The method of claim 1 where the hydrogen sulfide emission is reduced to about 50 ppm or lower.
- 4. (Previously Presented) The method of claim 1 where the zinc oxide is added in an amount ranging from 0.5 to 2 wt% based on the asphalt.
- 5. (Cancelled).
- 6. (Cancelled).
- 7. (Currently Amended) The method of claim 6-1 where-in adding the crosslinker, the crosslinker is further selected from the group consisting of elemental sulfur, mercaptobenzothiazole (MBT), thiurams, dithiocarbamates, mercaptobenzimidazole, and mixtures thereof.

8. (Cancelled).

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9. (Previously Presented) The method of claim 1 further comprised of adding aggregate.

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10. (Currently Amended) A method for preparing asphalt comprising: heating asphalt;

adding a crosslinker to the mixture, where the crosslinker is selected from the group consisting of elemental sulfur, mercaptobenzothiazole (MBT), thiurams, dithiocarbamates, mercaptobenzimidazole, and mixtures thereof; and

reducing hydrogen sulfide (H<sub>2</sub>S) emissions in the asphalt by adding- an amount of from 0.05 greater than 1.0 wt% to less than 3.0 wt% of said zinc oxide.

- 11. (Currently Amended) The method of claim 10 further comprised of adding a vinyl aromatic/conjugated diene elastomeric polymer to said asphalt, where the zine oxide is added in an amount greater than 0.15 wt% to less than 3.0 wt% and where the crosslinker is present in an amount ranging from about 0.01 to 0.6 wt%.
- 12. (Currently Amended) The method of claim 10 wherein zinc oxide that scavenges H2S is added in an amount ranging from 0.5 to about 2 wt.% based on the asphalt composition.
- 13. (Cancelled).
- 14. (Cancelled).
- 15. (Original) The method of claim 10 where the hydrogen sulfide emission is reduced to about 50 ppm or lower.

- 16. (Previously Presented) The method of claim 10 further comprised of adding aggregate.
- 17. (Previously Presented) An asphalt prepared by the method of claim 10.
- 18.-21. (Cancelled).
- 22. (Previously Presented) A road made from the asphalt of claim 17 and aggregate.
- 23. (Previously Presented) A roof sealed with the asphalt of claim 17.
- 24. (Previously Presented) A method of sealing a roof with asphalt comprising heating the asphalt of claim 17 and distributing it over at least a portion of a roof surface.
- 25. (Currently Amended) A method of road building comprising combining the asphalt of claim 17 with aggregate to form a road paving material, and using the material to form road pavement.
- 26. (Cancelled).
- 27. (Currently Amended) A method of recycling asphalt comprising:
  physically removing asphalt from a location;
  and in any order-reducing the size of the removed asphalt;
  -heating the removed asphalt:[,] and
  adding zinc oxide to the asphalt in an amount effective to reduce hydrogen sulfide
  (H<sub>2</sub>S) emissions, wherein an amount of from greater than 1 wt % 0.05 wt % to less than
  3.0 wt % of zinc oxide is added to the asphalt.
- 28. (Previously Presented) Asphalt made by the method of claim 27.
- 29. (Cancelled).

- 30. (Previously Presented) The method of claim 1 where the hydrogen sulfide emission is reduced to about 10 ppm or lower.
- 31. (Previously Presented) The method of claim 1 further comprising the step of reducing H<sub>2</sub>S emissions by adding the cross-linking agent at 280° F.
- 32. (Previously Presented) The method of claim 1 further comprising the step of reducing H<sub>2</sub>S emissions by adding the cross-linking agent at a lowest temperature at which asphalt can be effectively pumped.
- 33. (Previously Presented) An asphalt made by the method of claim 1.
- 34. (Previously Presented) An asphalt made by the method of claim 11.
- 35. (Currently Amended) The method of claim 27 wherein the asphalt is polymer modified and wherein greater than 0.15 wt % to less than 3.0 wt % of zine oxide is added and wherein thea crosslinker is present in an amount ranging from about 0.01 to 0.6 wt%.
- 36. (New) The method of claim 10 further comprising the step of adding a crosslinker ranging from 0.01 to 0.6 wt% based on the weight of the asphalt.
- 37. (New) A method for reducing hydrogen sulfide emissions from a non-elastomeric base asphalt, comprising:

adding zinc oxide to a non-elastomeric base asphalt in an amount effective to reduce hydrogen sulfide (H<sub>2</sub>S) emission;

wherein an amount of from greater than 0.1 wt % to less than 3.0 wt % of zinc oxide is added to the asphalt; and

wherein the zinc oxide reduces hydrogen sulfide emissions.

(New) The method of claim 37 further comprising the step of adding a crosslinker 38. in an amount ranging from about 0.01 to 0.6 wt%, wherein the crosslinker is selected from the group consisting of elemental sulfur, mercaptobenzothiazole (MBT), thiurams, dithiocarbamates, mercaptobenzimidazole, and mixtures thereof.

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39. (New) The method of claim 37 wherein the asphalt is comprised of recycled asphalt.

# REMARKS/ARGUMENTS

The claims as amended and newly added should not require an additional search. For example, Claim 1 has been amended to include a portion of the limitations previously set forth in Claims 6 and 8. Claim 10 has been amended to include a portion of the limitations of previous Claim 11. Newly added independent Claim 36 sets forth the range of crosslinkers previously set forth in Claim 11. Claim 37 has been newly added and more clearly sets for the non-elastomeric containing asphalt, previously discussed in Applicants' last office action response and set forth in Claim 1 et seq. as previously presented. There is support for Claim 37 in the published application at Par. [0027], lines 1-4, and Par. [0029] and [0030], for example.

### **CLAIM REJECTIONS:**

### 35 U.S.C. §112

Claim 6 stands rejected under 35 U.S.C. §112. Claim 6 has been cancelled, and the step of adding a cross-linker has been added to Claim 1. This amendment should overcome this rejection.

#### 35 U.S.C. §102(b)

Claims 1-3, 4, 6-12, 15-17, 22, 25, 27, 28, and 32-35 stand rejected under 35 U.S.C. §102(a or e) as being anticipated by U.S. Patent No. 6,767,939 (Butler). Claims 6 and 8 have been cancelled, and independent Claims 1, 10 and 27 have been amended to require more than 0.1 wt% of ZnO. The Butler '939 Patent does not teach a concentration of higher than 0.1 wt% of zinc oxide for any purpose (See specification generally and Table 3). Thus, the Butler '939 Patent does not anticipate the claims as amended which all require more than 0.1 wt% of zinc oxide. Further as previously stated, the '939 Butler patent does not teach the use of zinc oxide for reducing or eliminating hydrogen sulfide emissions.

Claims 1-3, 4, 6-12, 15-17, 22, 25, and 30-34 stand rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 5,104,916 (*Trinh*). As the Examiner acknowledges, Trinh teaches the use of 0.03 to 1% of ZnO, and 0.05 to 1.4% of a vulcanization composition (for elastomers), less ZnO. As such, Claim 1 has been

amended to require less than 0.05wt% of a cross-linker and Claims 10 and 27 have been amended to require greater than 1 wt% ZnO. Thus, Trinh does not anticipate the claims as amended. Newly added independent Claim 36 sets forth the range of crosslinkers previously set forth in Claim 11. In this connection, Independent Claim 37 has been newly added and more clearly sets for the non-elastomeric containing asphalt, previously discussed in Applicants' last office action response and set forth in Claim 1 et seq. as previously presented. Because Trinh teaches a *vulcanization composition for elastomers* and Claim 37 does not require or include elastomers, Trinh does not anticipate Claims 37-39. Further as previously stated, *Trinh* does not teach or disclose the use of zinc oxide to reduce hydrogen sulfide emissions. Therefore, no prima facie showing under 35 U.S.C. §102(b) has been made for such claims. For the same reasons, Claims 36-39 are also allowable.

# 35 U.S.C. §103(a)

Claims 23-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,767,939 (*Butler*).

Claims 23-24 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,104,916 (*Trinh*).

Those references have been discussed above. There is no suggestion to modify or combine the teachings of *Butler* and *Trinh* to arrive at Applicants' claimed invention. However, even if there was a suggestion to combine such references, *Butler* and *Trinh* still do not teach or Applicants' invention. Thus, no prima facie case of obviousness has been made, and such claims are allowable. For the same reasons, Claims 36-39 are also allowable.

# 35 U.S.C. §101 Statutory Double Patenting/Conflicting Claims - 37 CFR 1.78(b)

Various combinations of the claims have been rejected under 37 CFR 1.78(b) on the basis that the claims of the instant application conflict with the claims set forth several in U.S. patent applications and 1 issued patent.

More specifically, Claims 1, 4, 6-8, 10, 12, 17, 22, 25, 27, 28, 30-33, and 35 were provisionally rejected over Claims 1-3, 7, 9, 26, 41-43, and 49 of copending Application

No. 10/749,259. That application is currently on appeal and does not teach the use of zinc oxide to reduce H<sub>2</sub>S emissions, as set forth in the amended claims.

Claims 1, 4, 6-8, 10, 12, 17, 22, 25, and 30-33 were provisionally rejected over Claims 22, 23, 28, 32, 26, and 41 of U.S. Appl. No. 10/888,563. That application has issued as U.S. Pat. No. 7,186,765. All of the independent Claims of the '765 Patent require greater than 0.05% of a crosslinker, and less than 1% of ZnO. Also, this reference does not teach the use of zinc oxide to reduce H<sub>2</sub>S emissions, as set forth in the amended claims. Thus, this rejection has been overcome by the claim amendments.

Claims 1, 4, 17, 22, 25, 27, 28, 30-33, and 35 were provisionally rejected over Claims 11, 20, 31-33, 43, and 45-47 of U.S. Application No. 10/972,022. That application has been finally rejected, but is patentably distinct from the instant application since it requires the use of an inorganic acid and it does not teach the use of zinc oxide to reduce H<sub>2</sub>S emissions.

Claims 1, 4, 6-8, 10, 12, 17, 22, 25, and 30-33 were provisionally rejected over Claims 1-4, 7, 9, 11, 14-18, and 20-22 of U.S. Application No. 11/020,774. That application has not yet been examined, but is patentably distinct from the instant application since it requires the addition of a phenol aldehyde resin crosslinker to the mixture.

Claims 1 and 4 were provisionally rejected over Claims 3 and 11 of U.S. Application No. 11/250,665. That application has not yet been examined, but covers a method of modifying a crude fraction (defined as any of the various refinery products produced from crude oil, either by atmospheric distillation or vacuum distillation, including fractions that have been treated by hydrocracking, catalytic cracking, thermal cracking or coking and those that have been desulfurized) with claims that do not currently include a crosslinker.

Thus only one of the foregoing patent applications has issued as a patent, and the claims therein are patentably distinct. The claims pending in the other pending applications are also patentably distinct.

# Provisional Obviousness-Type Double Patenting

Various combinations of the claims have also been rejected on the basis that they are not patentably distinct from claims set forth in U.S. Application No. 10/749,259; U.S. Application No. 10/888,563 (now issued as 7,186,765); U.S. Application No. 10/972,022; U.S. Application No. 11/020,774; and U.S. Application No. 11/250,665.

In order to overcome such rejections, a terminal disclaimer for each of the foregoing cases was previously filed.

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In conclusion, Applicants submit that the references cited in the Office Action, do not teach, show, or suggest the claimed features, and that the other rejections and objections have been overcome. Applicants respectfully submit that the amended claims are now in condition for allowance, and respectfully request the same.

Dated Man H, 2007

Respectfully submitted

Shirley A. Kopecky Registration No. 48,460

FINA TECHNOLOGY, INC.

P.O. Box 674412

Houston, Texas, 77267-4412 Telephone: 713-483-5386 Facsimile: 713-483-5384 Attorney for Applicant(s)